

I claim:

1. A combination for application onto a pressurized fluid line having upstream and downstream ends, comprising:
 - a) a shutoff valve having an inlet for connection to the upstream end of the pressurized fluid line, an outlet for connection to the downstream end of the pressurized fluid line, and a springless actuator for driving a plug between open and closed positions of a main flow path connecting the upstream and downstream ends through the shutoff valve, and an upper chamber adjacent the springless actuator;
 - b) a normally closed two-position solenoid valve controlling flow between the upper chamber and an inlet bypass channel connected to the inlet of the shutoff valve; and
 - c) a fluid reset switch controlling flow between the upper chamber and a outlet bypass channel connected to the outlet of the shutoff valve;in which a region of reduced pressure is located downstream of the springless actuator but upstream of the downstream end of the pressurized fluid line, the region of reduced pressure being connected to the outlet bypass channel side of the fluid reset switch.
2. The combination of claim 1, in which the position of the shutoff valve is determined by the pressure of the fluid passing through the inlet and outlet bypass lines, solenoid valve and reset valve, and the resultant pressure on the valve actuator relative to the pressure in the main flow path through the shutoff valve.
3. The combination of claim 1, in which the shutoff valve further comprises a lower actuator chamber and an upper O-ring on the piston to prevent fluid from leaking from the main flow path into the lower actuator chamber.
4. The combination of claim 1, in which the shutoff valve further comprises a lower O-ring that closes the main flow path when the valve has been actuated.

5. The combination of claim 1, in which the shutoff valve further comprises a piston having a shaft that serves as the plug.
6. The combination of claim 1, in which the shutoff valve further comprises an upper actuator chamber, a lower actuator chamber, and an isolation O-ring that seals the upper actuator chamber and lower actuator chamber from each other.
7. The combination of claim 1, further comprising an upper valve seat recessed out of the main flow path.
8. The combination of claim 1, further comprising a lower valve seat in the main flow path.
9. The combination of claim 1, in which fluid does not flow through the solenoid valve when the shutoff valve is open to flow of fluid through the main flow path.
10. The combination of claim 1, in which the fluid reset switch is a two-position push button inline switch.
11. The combination of claim 1, in which the fluid reset switch is an electrically controlled valve.
12. The combination of claim 1, in which the fluid reset switch is manually activated.
13. The combination of claim 1, in which the fluid reset switch is remotely controlled.
14. The combination of claim 1, in which the fluid reset switch is controlled by an electrical signal.
15. The combination of claim 1, further comprising a fixture downstream of the valve system.
16. The combination of claim 15, in which the fixture is a two position flow switch.

17. The combination of claim 16, in which the two-position flow switch is one of a faucet, toilet, washing machine, and dishwasher.
18. The combination of claim 1, in which the solenoid valve controls operation of the shutoff valve in response to a non-continuous electrical signal to the solenoid valve.
19. The combination of claim 1, as installed on a domestic water line.
20. The combination of claim 1, in which the combination has a unitary construction.
21. The combination of claim 1, in which at least one of the inlet and outlet are fitted to be compatible with domestic water plumbing.
22. The combination of claim 1, in which at least one of the upstream and downstream ends of the pressurized fluid line has a size between $\frac{1}{4}$ inch and 1 inch in diameter.
23. The combination of claim 1, in which the combination has a flow rate less than 40 gallons per minute.
24. The combination of claim 1, in which the combination has a pressure drop of approximately 5 pound/square inch (psi) at 70 gallons per minute of flow.
25. The combination of claim 1, in which the shutoff valve has a power ratio of in the range of approximately eleven to one to approximately twelve to one.